IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

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Applicant	:	Pierre Guillaume Raverdy	
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Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

APPEAL BRIEF

Dear Sir:

Appellants submit, the following Appeal Brief pursuant to 37 C.F.R. § 41.37 for consideration by the Board of Patent Appeals and Interferences. Please charge any additional fees or credit any overpayment to our deposit Account No.02-2666.

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I. REAL PARTY IN INTEREST

The real party in interest is the assignee, Sony Corporation and Sony Electronics Inc.

II. RELATED APPEALS AND INTERFERENCES

There are no related appeals or interferences known to the appellants, the appellants' legal representative, or assignee, which will directly affect or be directly affected by or have a bearing on the Board's decision in the pending appeal.

III. STATUS OF CLAIMS

Claims 1-30 of the present application are pending. Claims 1, 8, and 15 are rejected under 35 U.S.C. §112. Claims 1-20 are rejected under 35 U.S.C. §103(a). The Appellant hereby appeals the rejections of claims 1-20.

IV. STATUS OF AMENDMENTS

On December 28, 2009, Appellant filed a response to an Office Action dated October 1, 2009. The Examiner issued a Final Office Action on April 13, 2010. On July 12, 2010, the Appellant filed a Notice of Appeal. No amendments have been filed subsequent to the final rejection.

V. SUMMARY OF CLAIMED SUBJECT MATTER

1. Independent claims :

Independent claims 1 and 14 recites: "A method comprising:

creating a session-based ad-hoc group (SBG)[1] within a well-known ad-hoc group (WKG) for impromptu interactions among unrelated mobile users[2], the SBG being one of an open SBG and a restricted SBG[3], the WKG having a WKG network configuration and a set of WKG interaction protocols[4], the SBG having SBG network configuration and a set of SBG interaction

[1] See Specification, paragraph [025], lines 1-2; Fig. 1 (SBGs 125_1 to 125_K).
[2] See Specification, paragraph [023], lines 1-2; Fig. 1 (WKGs 120 and 130).
[3] See Specification, paragraph [028], line 1; Fig. 3 (OPEN SBG 312 and RESTRICTED SBG 314).
[4] See Specification, paragraph [022], lines 5-6; Fig. 2, (WKG Network Configuration and Interaction Protocols 230).

protocols[5]; and advertising information pertaining to the SBG on the WKG[6], the information including an access method for joining the restricted SBG[7]."

Independent claim 27 recites: "A system comprising:

a well-known ad-hoc group (WKG) creator[8] to create a WKG for impromptu interactions among unrelated mobile users[9], the WKG having a WKG network configuration and a set of WKG interaction protocols[10]; and a session-based ad-hoc group (SBG) creator[11] to create a SBG within the WKG to allow a user to interact with other mobile users[12], the SBG being one of an open SBG and a restricted SBG[13], the SBG having SBG network configuration and a set of SBG interaction protocols[14], the SBG advertising information pertaining to the SBG on the WKG[15], the information including an access method for joining the restricted SBG[16]."

2. Dependent claims :

Dependent claims 2 and 15 essentially recite: "The method of claim 1 wherein creating the SBG comprises obtaining the WKG network configuration and the set of WKG interaction protocols.[17]"

Dependent claims 3 and 16 essentially recite: "The method of claim 2 wherein obtaining the WKG network configuration and the set of WKG interaction protocols comprises obtaining one of a pre-configuration on a retail device, a downloadable client software, and a public advertisement.[18]"

Dependent claims 4, 17, and 28 essentially recite: "The method of claim 1 wherein the WKG creates one of an open WKG and a restricted WKG, the open WKG having no access control[19], the restricted WKG having an access control to selected users.[20]"

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[5] See Specification, paragraph [030], lines 3-5; Fig. 3 (SBG Network Configuration and Interaction Protocols 330).
[6] See Specification, paragraph [027], lines 3-4; paragraph [031], lines 10-12.
[7] See Specification, paragraph [031], lines 19-21.
[8] See Specification, paragraph [018], lines 1-5; paragraph [022], lines 1-5; paragraph [020], lines 2-3; Fig. 2 (WKG CREATOR 210).
[9] See Specification, paragraph [023], lines 1-2; Fig. 1 (WKGs 120 and 130).
[10] See Specification, paragraph [022], lines 5-6; Fig. 2, (WKG Network Configuration and Interaction Protocols 230).
[11] See Specification, paragraph [019], lines 1-2; paragraph [025], lines 1-2; Fig. 3 (WKG 220).
[12] See Specification, paragraph [014], lines 1-5; paragraph [027], lines 1-3.
[13] See Specification, paragraph [028], line 1; Fig. 3 (OPEN SBG 312 and RESTRICTED SBG 314).
[14] See Specification, paragraph [030], lines 3-5; Fig. 3 (SBG Network Configuration and Interaction Protocols 330).
[15] See Specification, paragraph [027], lines 3-4; paragraph [031], lines 10-12.
[16] See Specification, paragraph [031], lines 19-21.
[17] See Specification, paragraph [030], lines 3-5.
[18] See Specification, paragraph [022], lines 6-9; Fig. 2 (Elements 232, 234, and 236).
[19] See Specification, paragraph [023], lines 6-8.
[20] See Specification, paragraph [023], lines 8-9;

Dependent claims 5, 18, and 29, essentially recite: "The method of claim 1 wherein creating the SBG comprises: creating one of the open SBG and the restricted SBG, the open SBG having no access control[21], the restricted SBG having an access control to selected users.[22]"

Dependent claims 6, 19, and 30, essentially recite: "The method of claim 5 wherein creating one of the open SBG and the restricted SBG comprises: selecting at least an administrator to manage access to the restricted SBG[23] and control changes to the SBG network configuration[24]."

Dependent claims 7 and 20 essentially recite: "The method of claim 6 wherein advertising comprises: selecting an advertising node according to a criteria within the SBG[25]; collecting information on the SBG[26]; periodically joining the WKG to broadcast the SBG information and to collect information on the WKG or a nearby SBG[27]; and returning to the SBG to advertise the information collected on the WKG to SBG members[28]."

Dependent claims 8 and 21 essentially recite: "The method of claim 1 further comprising: joining the WKG according to user configuration[29]."

Dependent claims 9 and 22 essentially recite: "The method of claim 8 wherein joining the WKG comprises: joining the SBG[30]."

Dependent claims 10 and 23 essentially recite: "The method of claim 1 further comprising: partitioning one of the WKG and the SBG[31]."

Dependent claims 11 and 24 essentially recite: "The method of claim 1 further comprising: merging the WKG to one other WKG[32]; and merging the SBG to one other SBG[33]."

Dependent claims 12 and 25 essentially recite: "The method of claim 1 further comprising: enabling interaction among the unrelated mobile users within the WKG or the SBG using the WKG interaction protocols or the SBG interaction protocols[34]."

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[21] See Specification, paragraph [028], lines 1-3; paragraph [029], line 1.
[22] See Specification, paragraph [028], lines 3-4; paragraph [029], lines 1-4.
[23] See Specification, paragraph [029], lines 1-2; Fig. 3 (Element 242).
[24] See Specification, paragraph [029], lines 2-4; Fig. 3 (Element 344).
[25] See Specification, paragraph [039], lines 2-3.
[26] See Specification, paragraph [040], lines 1-2.
[27] See Specification, paragraph [040], lines 2-5.
[28] See Specification, paragraph [040], lines 5-7.
[29] See Specification, paragraph [031], lines 1-3.
[30] See Specification, paragraph [031], line 14.
[31] See Specification, paragraph [033], lines 1-3; paragraph [034], lines 1-2.
[32] See Specification, paragraph [033], lines 5-6.
[33] See Specification, paragraph [033], lines 6-7; paragraph [034], lines 6-8.

Dependent claims 13 and 26 essentially recite: "The method of claim 12 wherein enabling interaction comprises: managing an application[35]; discovering at least one of a host, an application, and a user profile; managing distributed resource; and managing group information[36]."

VI. GROUNDS OF REJECTION TO BE REVIEWED ON APPEAL

(1) Claims 27-30 are rejected under 35 U.S.C. §101 because the claimed invention is directed to non-statutory subject matter.

(2) Claims 1-6, 14-19, and 27-30 stand rejected under 35 U.S.C. §102(e) as being anticipated by U.S. Publication No. 2004/0133689 A1 issued to Vasisht et al. ("Vasisht").

(3) Claims 7, 12-13, 20, and 25-26 stand rejected under 35 U.S.C. §103(a) as being unpatentable over Vasisht in view of U.S. Patent No. 7,284,062 B2 issued to Krantz et al. ("Krantz"), and Feeney et al. (Communications Magazine, IEEE, June 2001, p. 176-181 or p.1-12) ("Feeney").

(4) Claims 8-11 and 21-24 stand rejected under 35 U.S.C. §103(a) as being unpatentable over Vasisht in view of Feeney.

VII. ARGUMENTS

A. Claims 27-30 are directed to statutory subject matter (35 U.S.C. §101)

Claims 27-30 are rejected under 35 U.S.C. § 101 because the claimed invention is allegedly directed to non-statutory subject matter.

Specifically, the Examiner contends that "the creator as per paragraph 31 of applicant's specification is of software nature, e.g., 'some module on the device may dynamically create a WEP key'. That is not a process, machine, manufacture or composition of matter as per 35 U.S.C. 101." (Final Office Action, page 2, paragraph 5a.)

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[34] See Specification, paragraph [045], lines 5-6.
[35] See Specification, paragraph [075], lines 10-12.
[36] See Specification, paragraph [044], line 3; paragraph [045], lines 1-3; paragraph [047], lines 5-6; Fig. 5 (element 542); paragraph [065], line 1.

The Examiner further contends that "[a] claim language may be read in light of applicant's specification. However, the claim language must be specific about the reference, i.e., the creator should be specifically referred to as a device, e.g. a computing device is used to create a WKG. Otherwise, the creator would be read as a person or a company as per paragraph 31 of applicant's specification." (Final Office Action, page 3, paragraph 5a).

Applicant respectfully disagrees for the following reasons.

a) First, the Examiner merely states that "the creator .. is of software nature, .. [t]hat is not a process, machine, manufacture or composition of matter as per 35 U.S.C. 101" without providing any analysis. Applicant submits that the module/device implementing the WKG creator is statutory, and even if it is implemented by software, claims 27-30 are statutory.

The Specification clearly states that the WKG is created by a device (Specification, paragraph [020], lines 2-3) and therefore satisfies the requirements of 35 U.S.C. §101. Even if this device includes software, it is still statutory. Computer programs are often recited as part of a claim. USPTO personnel should determine whether the computer program is being claimed as part of an otherwise statutory manufacture or machine. In such a case, the claim remains statutory irrespective of the fact that a computer program is included in the claim. The same result occurs when a computer program is used in a computerized process where the computer executes the instructions set forth in the computer program. Only when the claimed invention taken as a whole is directed to a mere program listing, i.e., to only its description or expression, is it descriptive material *per se* and hence nonstatutory. MPEP 2106.01.

The Examiner has not met the burden of showing that the claimed invention taken as a whole is directed to a mere program listing and descriptive material.

b) Second, claims must be interpreted according to the Specification.

During patent examination, the pending claims must be "given the broadest reasonable interpretation consistent with the specification". See MPEP § 2111. Applicant submits that "a WKG may be created and/or joined by any device…" and "devices in a WKG create an SBG" (See Specification, paragraphs [0019]-[0020]). As further stated in the specification and illustrated in Figure 1: "Each of the mobile devices 126_1 to 126_L, 136_1 to 136_P, and 140_1 to 140_N typically contains a mobile processor that can execute instructions or programs to perform tasks as described in the following. Each of them may also be equipped by one or multiple WiFi

radios or interface cards" (See Specification, paragraph [020], Figure 1). *Emphasis Added.* Given that the device is an apparatus which is statutory, the system claims 27-30 are directed to statutory subject matter. Applicant submits that the WKG creator and SBG creator represent physical entities such that the claims tie the elements to a particular machine. The SBG is created from a WKG which is a physical entity (See, for example, Specification, paragraph [025]). The SBG creator, therefore, represents a physical entity. The WKG creator is also a physical entity that defines a WiFi configuration and creates or instantiates a WKG configuration from the created WiFi configuration (See, for example, Specification, paragraph [022]). In addition, Figure 2 in the Specification clearly shows the WKG creator as a box labeled 210. The WKG creator 210 is a device that creates the WKG. Additionally, Figure 6 and the corresponding paragraphs [052] – [057] describe a system that implements the group interacting module (See Specification, paragraph [055], lines 4-7).

The Examiner's literal interpretation of the language that "the WKG creator 210 may be any entity such as a company, a government agency, an open source community, or even an individual," as provided in the Specification (paragraph [022], lines 2-5), is misplaced. The description should be read and interpreted according to the context. First, the phrase "WKG creator 210 may be any entity" indicates that this is one of several possible embodiments. Second, the term "entity" refers to "something that exists as a particular and discrete unit" (See, for example, Webster's II New College Dictionary, 1995, by Houghton Mifflin Company). Accordingly, the term "entity" may refer to a device, a unit, a system. Furthermore, the Specification refers to "entity" as a physical device (See Specification, paragraph [019], line 3). Third, the phrase "such as" in the above refers to a list of exemplary entities, not necessarily exhaustive. Fourth, a company, a government agency, or an individual refers to the owner or the operator of the WKG creator. It is clear that in order to create the WKG, a company or an individual has to use some specific device to carry out the creation.

c) Third, as required by the MPEP, the burden is on the USPTO to set forth a *prima facie* case of unpatentability. MPEP 2106 IV.B.

USPTO personnel should review the totality of the evidence (e.g., the specification, claims, relevant prior art) before reaching a conclusion with regard to whether the claimed invention sets forth patent eligible subject matter. USPTO personnel must weigh the determinations made above to reach a conclusion as to whether it is more likely than not that the claimed invention as a whole either falls outside of one of the enumerated statutory classes or

within one of the exceptions to statutory subject matter. "The examiner bears the initial burden of presenting a *prima facie* case of unpatentability." *In re Oetiker*, 977 F.2d 1443, 1445, 24 USPQ2d 1443, 1444 (Fed. Cir. 1992). If the record as a whole suggests that it is more likely than not that the claimed invention would be considered a practical application of an abstract idea, natural phenomenon, or law of nature, then USPTO personnel should not reject the claim. MPEP 2106 IV.D. After USPTO personnel identify and explain in the record the reasons why a claim is for an abstract idea with no practical application, then the burden shifts to the applicant to either amend the claim or make a showing of why the claim is eligible for patent protection. See, e.g., *In re Brana*, 51 F.3d 1560, 1566, 34 USPQ2d 1436, 1441 (Fed. Cir. 1995) MPEP 2106 IV.D. Here, the Examiner has not met the burden of establishing a prima facie case of unpatentability because the Examiner has not proved that the claim is for an abstract idea with no practical application.

The specification provides ample support that the operations recited in the rejected claims are within the statutory subject matter. As discussed above, the WKG creator and the SBG creator are physical entities, and are not mere program listings or descriptive materials.

Accordingly, Applicant submits that claims 27-30 are statutory under 35 U.S.C. §101.

B. Claims 1-6, 14-19, and 27-30 are not anticipated under 35 U.S.C. §102(e) over Vasisht.

In the Office Action, the Examiner rejected claims 1-6, 14-19, and 27-30 under 35 U.S.C. §102(e) as being anticipated by U.S. Publication No. 2004/0133689 A1 issued to Vasisht et al. ("Vasisht"). Applicant respectfully traverses the rejection and submits that the Examiner has not met the burden of establishing a *prima facie* case of anticipation.

Vasisht discloses method, system and device for automatically configuring a communications network. Improvements in configuring node devices for networking include a Zero Configuration Utility for WiFi that gives users a list of available WiFi networks. If the networks are broadcasting their SSID and do not have encryption, the user can log on to the network by simply accepting a network in the Zero Configuration Utility interface. (Vasisht, par. [0018]). In the case of a network using 802.11 b, at minimum a Service Set Identifier (or SSID) is required on each 802.11 b-equipped router (Vasisht, par. [0013]).

Vasisht does not disclose, either expressly or inherently, at least one of: (1) creating a session-based ad-hoc group (SBG) within a well-known ad-hoc group (WKG) for impromptu

interactions among unrelated mobile users, the WKG having a WKG network configuration and a set of WKG interaction protocols, the SBG having SBG network configuration and a set of SBG interaction protocols; and (2) advertising information pertaining to the SBG on the WKG, as recited in independent claims 1 and 14, and (3) a well-known ad-hoc group (WKG) creator to create a WKG for impromptu interactions among unrelated mobile users, the WKG having a WKG network configuration and a set of WKG interaction protocols; and (4) a session-based ad-hoc group (SBG) creator to create a SBG within the WKG to allow a user to interact with other mobile users, the SBG having SBG network configuration and a set of SBG interaction protocols, the SBG advertising information pertaining to the SBG on the WKG, as recited in independent claim 27.

First, Vasisht merely discloses home networks having 802.11b equipped routers with the same default service set identifier (SSID) setting on each device (Vasisht, par. [0005], lines 1-3; par. [0009], lines 15-17), not "for impromptu interactions among unrelated mobile users," as claimed. For routers supporting WiFi, the SSID is defaulted to a standard factory default (Vasisht, par. [0014], lines 10-11). The user still has to acknowledge and enter the same SSID on the node devices (Vasisht, par. [0016], lines 8-9). Since all the node devices have the same SSID and are connected to the same home network, they are not unrelated mobile users. Furthermore, the interactions of these node devices occur under a configuration or coordination, either through a zero configuration utility (Vasisht, par. [0018], lines 1-5), or an automatic configuration (Vasisht, par. [0023], lines 6-7). Accordingly, these interactions are not impromptu interactions. An impromptu interaction is an interaction that occurs in a coincidental way without any pre-coordination. (See, for example, Specification, par. [0014], lines 4-5).

In the Final Office Action, the Examiner contends that the claimed invention is "consistent with Vasisht's discussion of using WIFI, i.e. WLAN, with SSID and authentication or an encryption to permit working with other node devices in a home network, a Small Office Home Office network." (Final Office Action, page 12, paragraph 9b). Applicant respectfully disagrees.

A small office home network is not used for impromptu interactions. As provided by Microsoft (retrieved at http://technet.microsoft.com/en-us/library/cc940258.aspx), SOHO networks are defined in the following:

> "Small Office/Home Office (SOHO) networks are used primarily in home offices that might be part of a larger corporation but yet remain apart from it. The SOHO can use two technologies that

> allow connections between the clients on the SOHO and either the Internet, the corporate network, or both. These technologies are Internet Connection Sharing (ICS) and network address translation (NAT).
>
> SOHO networks are usually *peer-to-peer networks*. This type of network is a single subnet that is used to *conveniently connect clients together*, excluding the need for routers, DHCP servers, or WINS servers. This is ideal for home offices *where a user needs to use more than one computer, and also needs to be able to share resources from one computer to another, such as files, applications, or printers*." (Emphasis added.)

As seen from the above, a SOHO network is used in home offices and for peer-to-peer network where a user needs to use more than one computer. In this scenario, all the clients belong to the same user and therefore they cannot be unrelated mobile users. Accordingly, a SOHO network cannot be used for impromptu interaction.

Second, Vasisht merely discloses improvements in configuring node devices for networking (Vasisht, paragraph [0018], lines 1-2), not "creating a session-based ad-hoc group (SBG) *within* a well-known ad-hoc group (WKG)", as recited in the rejected claims. The improvements include a Zero Configuration Utility for WiFi that gives users a list of available WiFi networks (Vasisht, paragraph [0018], lines 3-4). The Examiner alleges the WiFi networks are equivalent to a SBG and/or WKG (Final Office Action, page 4, paragraph 6a). Applicant respectfully disagrees for the following reasons. The WiFi networks which appear on the list are merely available WiFi networks, which may or may not require authentication or an encryption key, and the user may select one of the networks on the list in order to log his computer onto that selected network (Vasisht, paragraph [0018], lines 4-16). They appear to be at the same hierarchical level within the network. There is no provision for one WiFi network to create another WiFi network. Vasisht specifically discloses that the node services share a WAN service connection, such as a broadband Internet connection, within the home (Vasisht, paragraph [0060], lines 4-7), or devices with compatible network configuration parameters to be able to exchange data and share resources (Vasisht, paragraph [0060], lines 7-9). In other words, these node devices are at the same level of hierarchy. One device cannot create a network for another device. In contrast, a SBG is created within the WKG as claimed.

Third, Vasisht merely discloses a Service Set Identifier (or SSID) being required on each 802.11 b-equipped router (Vasisht, par. [0013]), not "advertising information pertaining to the SBG on the WKG", as recited in the claims. As discussed above, the available WiFi networks

are not equivalent to the SBG, such that the SSID of a WiFi network cannot be the "information pertaining to the SBG".

Fourth, even if the WiFi networks were equivalent to the SBG, the SSID is not "an access method for joining the restricted SBG", as recited in the claims, because SSID is used only to allow a user to log on "should the network require authentication or an encryption key" (Vasisht, par. [0018]). Logging on is merely to log on to use the WiFi networks, but not to join a group. Moreover, the WiFi networks as disclosed by Vasisht do not have open and restricted groups, therefore, logging on merely allows user to log on a WiFi network, not to join the group which requires a membership to be granted.

The Examiner cites several paragraphs to support the Examiner's arguments. However, none of these excerpts provides the necessary support. For ease of reference, the relevant paragraphs are copied below.

> "Recognizing the problems associated with complexity of setting up home networks, manufacturers of home networking products have made improvements to product features described hereunder in the context of configuring required networking parameters. Some examples of improvements to the description above have been incorporated recently in available routers, and described here. Routers are commonly defaulted with LAN NAT and DHCP settings as "ON", recognizing that most users use this configuration. *For routers supporting WiFi, the SSID is defaulted to a standard factory default* (e.g. Linksys routers have a default SSID of `linksys`), and WEP is `OFF` in order to enable the user to follow fewer steps to set up the network. Typically the WEP key is an ASCII or Hexadecimal (HEX) string. In order to simplify the entry of a WEP key, some manufacturers allow the user to enter a password or pass phrase that then generates an ASCII or HEX WEP key." (Vasisht, paragraph [0014]. Emphasis added.)

> "Some of the problems that still exist in current routers despite the above improvements are: In setting up the router, the user has to know whether the ISP requires settings other than modem's MAC address to authenticate the user. If so, the user has to configure the router accordingly with settings obtained from the ISP, or settings obtained from the device connected to the ISP. Whereas the SSID may be defaulted in the router, the user still has to acknowledge and enter the same SSID on the node devices (e.g., PCs). *Further since routers from the manufacturer are defaulted to the same SSID*, the user is advised to change the SSID manually to ensure privacy of her network. In addition, users should use WEP at minimum to secure their network from snooping, since SSID is not secure. Defaulting to WEP "OFF" is therefore well recognized as a fundamental flaw in current solutions. In order to turn WEP (or

> another form of encryption such as WPA) "ON" requires the user to enter an encryption code or `pass phrase` on the router, and the same code on the PCs." (Vasisht, paragraph [0016]. Emphasis added.)
>
> "Improvements in configuring node devices for networking include, in the Windows XP operating system, introduction by Microsoft of a Zero Configuration Utility for WiFi that gives users a list of available WiFi networks. *If the networks are broadcasting their SSID and do not have encryption, the user can log on to the network by simply accepting a network in the Zero Configuration Utility interface*. However, *should the network require authentication or an encryption key, the user has to enter this information*. Consequently, Microsoft's Zero Configuration Utility for WiFi in Windows XP reduces the steps for configuring a WiFi NIC in some instances, but not always. Microsoft's configuration utility supplied with its line of WiFi home networking adapters (e.g., Model: MN 520 PC card) provides a feature to enable a user to backup or copy on floppy network entries made on a PC. This permits ease of transfer of network settings to other node devices, thereby minimizing repeated manual entries of the required setting on subsequent network PCs." (Vasisht, paragraph [0018]. Emphasis added.)
>
> "Therefore, there is a need for a system and method that overcome the above and other problems with the above-noted methods and systems. The above and other needs are addressed by the exemplary embodiments of the present invention, which provide a system and method for *automatically configuring devices* in a communications network, such as a home network, a Small Office Home Office (SOHO) network, and the like, with minimal user input or networking expertise. (Vasisht, paragraph [0023]. Emphasis added.)

As seen from the above excerpts, Vasisht merely discloses that all the node devices have the same SSID and are connected to the same home network. Accordingly, *they are not unrelated mobile users,* as recited in the claim. Furthermore, Vasisht merely discloses that the interactions of these node devices occur under a configuration or coordination, either through a zero configuration utility or an automatic configuration. Accordingly, these interactions are not *impromptu interactions*, as recited in the rejected claims. An impromptu interaction is an interaction that occurs in a coincidental way without any pre-coordination. (See, for example, Specification, paragraph [0014], lines 4-5).

In addition, Applicant submits that both the SSID and the WEP in Vasisht pertain to the available WiFi networks which cannot correspond to the SBG. Accordingly, neither the SSID nor the WEP can be the information on the SBG as discussed above.

Furthermore, the SSID cannot be the information on the SBG because the claims further recite "advertising information pertaining to the SBG on the WKG, the information including an access method for joining the restricted SBG." In paragraph [040], the specification provides four examples of information on the SBG such as "the SSID, the membership, the interaction protocols used, and the login procedure" (Specification, paragraph [040]). While the SSID is an example of information on the SBG, Applicant elected to claim "the information including an access method for joining the restricted SBG." Since the SSID does not include an access method for joining the restricted SBG, the SSID cannot be the information on the SBG as delineated in the claims.

"A claim is anticipated only if each and every element as set forth in the claim is found, either expressly or inherently described, in a single prior art reference." *Vergegaal Bros. v. Union Oil Co. of California*, 814 F.2d 628, 631, 2 USPQ 2d 1051, 1053 (Fed. Cir. 1987). "The identical invention must be shown in as complete detail as is contained in the...claim." *Richardson v. Suzuki Motor Co.*, 868 F.2d 1226, 1236, 9 USPQ 2d 1913, 1920 (Fed. Cir. 1989). The Examiner bears the burden of presenting at least a *prima facie* case of anticipation. *In re King*, 801 F.2d 1324, 1327, 231 USPQ 136, 138-139 (Fed. Cir. 1986); *In re Wilder*, 429 F.2d 447, 450, 166 USPQ 545, 548 (CCPA 1970). Only if that burden is met, does the burden of going forward shift to the applicant. *In re King*, 801 F.2d at 1327, 231 USPQ at 138-139; *In re Wilder*, 429 F.2d at 450, 166 USPQ at 548. Once a prima facie case is established and rebuttal evidence is submitted, the ultimate question becomes whether, based on the totality of the record, the Examiner carried his burden of proof by a preponderance. See *In re Oetiker*, 977 F.2d 1443, 1445. 24 USPQ2d 1443, 1444 (Fed. Cir. 1992). If the Examiner fails to establish a prima facie case, the rejection is improper and will be overturned. *In re Fine*, 837 F.2d 1071, 1074, 5 USPQ2d 1596, 1598 (Fed. Cir. 1988). Since the Examiner failed to show that Vasisht teaches or discloses any one of the above elements, the rejection under 35 U.S.C. §102 is improper.

Therefore, Applicant submits that independent claims 1, 14, and 27 and their respective dependent claims are distinguishable over the cited prior art references.

C. Claims 7, 12-13, 20, and 25-26 are not rendered obvious under 35 U.S.C. §103(a) over Vasisht in view of Krantz.

In the Final Office Action, the Examiner rejected claims 7, 12-13, 20, and 25-26 under 35 U.S.C. §103(a) as being unpatentable over Vasisht and further in view of U.S. Patent No.

7,284,062 B2 issued to Krantz et al. ("Krantz"), and Feeney et al. (Communications Magazine, IEEE, June 2001, p. 176-181) ("Feeney"); and claims 8-11 under 35 U.S.C. §103(a) as being unpatentable over Vasisht and further in view of Feeney. Applicant respectfully traverses the rejection and submits that the Examiner has not met the burden of establishing a *prima facie* case of obviousness.

To establish a *prima facie* case of obviousness, three basic criteria must be met. First, there must be some suggestion or motivation, either in the references themselves or in the knowledge generally available to one of ordinary skill in the art, to modify the reference or to combine reference teachings. Second, there must be a reasonable expectation of success. Finally, the prior art reference (or references when combined) must teach or suggest all the claim limitations. *MPEP §2143, p. 2100-126 to 2100-130 (8th Ed., Rev. 5, August 2006).* Applicant respectfully submits that there is no suggestion or motivation to combine their teachings, and thus no *prima facie* case of obviousness has been established.

Furthermore, the Supreme Court in *Graham v. John Deere*, 383 U.S. 1, 148 USPQ 459 (1966), stated: "Under § 103, the scope and content of the prior art are to be determined; differences between the prior art and the claims at issue are to be ascertained; and the level of ordinary skill in the pertinent art resolved. Against this background, the obviousness or nonobviousness of the subject matter is determined." MPEP 2141. In *KSR International Co. vs. Teleflex, Inc.*, 127 S.Ct. 1727 (2007) (Kennedy, J.), the Court explained that "[o]ften, it will be necessary for a court to look to interrelated teachings of multiple patents; the effects of demands known to the design community or present in the marketplace; and the background knowledge possessed by a person having ordinary skill in the art, all in order to determine whether there was an apparent reason to combine the known elements in the fashion claimed by the patent at issue." The Court further required that an explicit analysis for this reason must be made. "[R]ejections on obviousness grounds cannot be sustained by mere conclusory statements; instead, there must be some articulated reasoning with some rational underpinning to support the legal conclusion of obviousness." *KSR 127 S.Ct.* at 1741, quoting *In re Kahn*, 441 F.3d 977, 988 (Fed. Cir. 2006). In the instant case, Applicant respectfully submits that there are significant differences between the cited references and the claimed invention and there is no apparent reason to combine the known elements in the manner as claimed, and thus no *prima facie* case of obviousness has been established.

Vasisht discloses method, system and device for automatically configuring a communications network as discussed above.

Krantz discloses increasing the level of automation when provisioning a computer system to access a network. Data routing device is a device capable of grouping computer systems together in a single broadcast domain (Krantz, col. 12, lines 27-31).

Feeney discloses spontaneous networking: an application-oriented approach to ad-hoc networking. An ad hoc network provides administrative services and supports functionalities including address allocation, name resolution, service location, authentication, and access control policies (Feeney, Abstract). A spontaneous network reflects intentional interactions among the users, who have chosen to collaborate for some purpose (Feeney, page 4, lines 6-7).

Vasisht, Krantz, and Feeney, taken alone or in any combination, do not disclose or render obvious (1) creating a session-based ad-hoc group (SBG) within a well-known ad-hoc group (WKG) for impromptu interactions among unrelated mobile users, the WKG having a WKG network configuration and a set of WKG interaction protocols, the SBG having SBG network configuration and a set of SBG interaction protocols; and (2) advertising information pertaining to the SBG on the WKG, as recited in independent claims 1 and 14, and (3) a well-known ad-hoc group (WKG) creator to create a WKG for impromptu interactions among unrelated mobile users, the WKG having a WKG network configuration and a set of WKG interaction protocols; and (4) a session-based ad-hoc group (SBG) creator to create a SBG within the WKG to allow a user to interact with other mobile users, the SBG having SBG network configuration and a set of SBG interaction protocols, the SBG advertising information pertaining to the SBG on the WKG, as recited in amended independent claim 27; and (5) selecting an advertising node according to a criteria within the SBG; (6) collecting information on the SBG; (7) periodically joining the WKG to broadcast the SBG information and to collect information on the WKG or a nearby SBG; and (8) returning to the SBG to advertise the information collected on the WKG to SBG members, as recited in claims 7 and 20.

As discussed above, Vasisht does not disclose or render obvious elements (1)-(4) as recited in independent claims 1, 14, and 27. Accordingly, a combination of Vasisht with any other references in rejecting claims dependent thereon is improper.

Furthermore, Krantz merely discloses a data routing device being a device capable of grouping computer systems together in a single broadcast domain (Krantz, col. 12, lines 27-31). Feeney merely discloses an ad hoc network providing administrative services and supporting

functionalities including address allocation, name resolution, service location, authentication, and access control policies (Feeney, Abstract). None of these is related to the claimed invention. For example, address allocation merely allocates the addresses for a network. Name resolution merely tries to resolve some of the numerical address values into a human readable format. These operations only relate to access a network. Accessing a network does not necessarily involve selecting an advertising node according to a criteria within the SBG; collecting information on the SBG; periodically joining the WKG to broadcast the SBG information and to collect information on the WKG or a nearby SBG; and returning to the SBG to advertise the information collected on the WKG to SBG members.

Moreover, Feeney specifically discloses a spontaneous network, not a group for impromptu interactions among unrelated mobile users. A spontaneous network reflects *intentional* interactions among the users, who have chosen to *collaborate* for some purpose (Feeney, page 4, lines 6-7). Since a spontaneous network reflects *intentional* interactions among the users, it cannot be a SBG or a WKG for impromptu interactions among unrelated mobile users.

The Examiner alleges that it would have been obvious to modify Vasisht's functions of using WEP/802.11 in configuring a user network with limit access with Feeney's functions of establishing ad hoc network without pre-established or central network management and Krantz's functions of using a data routing device to group computer systems (Final Office Action, page 8, paragraph 7d). Applicant respectfully disagrees for the following reasons.

Claims 7 and 20 recite "selecting an advertising node according to a criteria within the SBG; collecting information on the SBG; periodically joining the WKG to broadcast the SBG information and to collect information on the WKG or a nearby SBG; and returning to the SBG to advertise the information collected on the WKG to SBG members".

As provided above, the WiFi networks in Vasisht are not the same as SBG. In addition, none of the functionalities including address allocation, name resolution, service location, authentication, and access control policies, as provided in Feeney, involve at least "collecting information on the WKG… and advertise the information collected on the WKG to SBG members" as recited in the claims. Furthermore, Krantz merely discloses a data routing device which does not disclose either a WKG or a SBG, let alone any of the elements as delineated in claims 7 and 20.

In the Final Office Action, the Examiner states that the pre-determined network configuration criteria (per paragraph 79 of Vasisht) seem to provide some meaningful criteria for home networking (Final Office Action, page 12, paragraph 9d). For ease of reference, the cited paragraph is copied below.

> "When executed, the configuration manager generates the employed network settings, and through a sequence of mostly automated steps requiring minimal user inputs, configures one or more network devices based on the NID, *predetermined network configuration criteria*, and automatically generated settings. In addition to using the configuration manager to establish an initial configuration of the home network 200, a user can restore a device 212 or 208 on the home network 200 in the event of a malfunction or breakdown of the network through reinstating the automated configuration; or to add new node devices 212 to the existing home network 200 originally set up based on the exemplary embodiments. This capability is advantageous for troubleshooting and maintaining the home network by a lay user." (Vasisht, paragraph [0079]. *Emphasis added.*)

As seen from the above excerpt, Vasisht merely discloses predetermined network configuration criteria, not a criteria within the SBG. A predetermined network configuration criteria are criteria related to the configuration of the network. In contrast, criteria within the SBG are criteria for impromptu interactions among unrelated mobile users, as claimed. Accordingly, these criteria cannot be pre-determined network configuration which imposes on pre-determined devices, not unrelated mobile users. These criteria within the SBG, for example, may include the trustworthiness of the node, the access versatility of the device (e.g., having multiple WiFi cards) (See, for example, Specification, paragraph [039]).

The Examiner further contends that Krantz has shown that a data routing device can be a device capable of grouping computer systems together in a single broadcast domain based on criteria other than physical location in an analogous art for the purpose of automatic provisioning computer system for accessing a network (Final Office Action, page 8, paragraph 7c). Applicant respectfully disagrees. The data routing device 214 merely groups the computer together, separate computer systems into different VLANs, or transfer both tagged and untagged data frames between and VLANs (Krantz, col. 12, lines 28-38). None of these operations corresponds to "selecting an advertising mode according to a criteria within the SBG," as claimed.

D. Claims 8-11 and 21-24 are not rendered obvious under 35 U.S.C. §103(a) over Vasisht in view of Feeney.

Vasisht and Feeney are discussed above.

Vasisht and Feeney, taken alone or in any combination, do not disclose or render obvious (1) – (4) as discussed above; and (9) joining the WKG according to user configuration, as recited in claims 8 and 21; (10) joining the SBG, as recited in claims 9 and 22; (11) partitioning one of the WKG and the SBG, as recited in claims 10 and 23; and (12a) merging the WKG to one other WKG and (12b) merging the SBG to one other SBG; as recited in claims 11 and 24.

As discussed above, Vasisht does not disclose or render obvious elements (1)-(4) as recited in independent claims 1, 14, and 27. Accordingly, a combination of Vasisht with any other references in rejecting claims dependent thereon is improper.

Furthermore, Feeney does not provide the necessary support for the joining group. The Examiner contends that Feeney has shown that joining group in an analogous art for the purpose of providing an ad hoc networking based application, citing page 8, section with heading "Network partition and merge" (Final Office Action, page 9, paragraph 8b). Applicant respectfully disagrees. For ease of reference, the cited excerpt is copied below:

> Network partition and merge
>
> During the meeting, the project team is divided into two groups. One of the groups moves to another meeting room. The two groups lose wireless connectivity with each other, but continue to work on the shared documents.
>
> . . .
>
> One more person, Ms. Late, joins the group in the original meeting room where Mr. Host is. He exchanges electronic business cards with her, transferring the secret session key, which includes her in the spontaneous VPN for the meeting.
>
> Note that Ms. Late *joins the group while the network is partitioned*. Duplicate address detection can thus only be reliably done within the local partition. There could be more members joining in the other partition which the nodes in the local partition do not know about.
>
> When the team gets back to the meeting room, the two partitions of the spontaneous VPN merge. The collaborative application reconciles the document replicas that the groups have independently edited.
>
> Ms. Late's equipment can now for the first time communicate with the whole network. Duplicate address and naming conflicts are

> issues. It is necessary to synchronize both the state of various network services and the objects maintained by the application. Naturally, the collaborative application may need manual intervention t e able to reconcile the documents." (Feeney, page 8, section under "Network partition and merge". *Emphasis added.*)

As seen from the above excerpt, Feeney merely discloses a person who joins a group. The group here refers to a project team collaborating on a shared document. As discussed above, the network is a spontaneous network, defined as a network that reflects *intentional* interactions among the users, who have chosen to *collaborate* for some purpose (Feeney, page 4, lines 6-7). Accordingly, they are not unrelated mobile users and/or for impromptu interactions. The group cannot be a WKG or a SBG. In addition, Feeney merely discloses the person joining the group while the network is partitioned, not joining the WKG or the SBG. The WKG or the SBG is not a partitioned network. Furthermore, since the group cannot be a WKG or a SBG, there is no partitioning one of the WKG and the SBG, or merging a WKG to one other WKG, or merging the SBG to one other SBG.

The Examiner failed to establish a prima facie case of obviousness and failed to show there is teaching, suggestion, or motivation to combine the references. When applying 35 U.S.C. 103, the following tenets of patent law must be adhered to: (A) The claimed invention must be considered as a whole; (B) The references must be considered as a whole and must suggest the desirability and thus the obviousness of making the combination; (C) The references must be viewed without the benefit of impermissible hindsight vision afforded by the claimed invention; and (D) Reasonable expectation of success is the standard with which obviousness is determined. *Hodosh v. Block Drug Col, Inc.,* 786 F.2d 1136, 1143 n.5, 229 USPQ 182, 187 n.5 (Fed. Cir. 1986). "When determining the patentability of a claimed invention which combined two known elements, 'the question is whether there is something in the prior art as a whole suggest the desirability, and thus the obviousness, of making the combination.'" *In re Beattie*, 974 F.2d 1309, 1312 (Fed. Cir. 1992), 24 USPQ2d 1040; *Lindemann Maschinenfabrik GmbH v. American Hoist & Derrick Co.*, 730 F.2d 1452, 1462, 221 USPQ (BNA) 481, 488 (Fed. Cir. 1984). To defeat patentability based on obviousness, the suggestion to make the new product having the claimed characteristics must come from the prior art, not from the hindsight knowledge of the invention. *Interconnect Planning Corp. v. Feil*, 744 F.2d 1132, 1143, 227 USPQ (BNA) 543, 551 (Fed. Cir. 1985). To prevent the use of hindsight based on the invention to defeat patentability of the invention, this court requires the Examiner to show a motivation to combine the references that create the case of obviousness. In other words, the Examiner must show

reasons that a skilled artisan, confronted with the same problems as the inventor and with no knowledge of the claimed invention, would select the prior elements from the cited prior references for combination in the manner claimed. *In re Rouffet*, 149 F.3d 1350 (Fed. Cir. 1996), 47 USPQ 2d (BNA) 1453. "To support the conclusion that the claimed invention is directed to obvious subject matter, either the references must expressly or implicitly suggest the claimed invention or the Examiner must present a convincing line of reasoning as to why the artisan would have found the claimed invention to have been obvious in light of the teachings of the references." *Ex parte Clapp*, 227 USPQ 972, 973. (Bd.Pat.App.&Inter. 1985). The mere fact that references can be combined or modified does not render the resultant combination obvious unless the prior art also suggests the desirability of the combination. *In re Mills*, 916 F.2d 680, 16 USPQ2d 1430 (Fed. Cir. 1990). Furthermore, although a prior art device "may be capable of being modified to run the way the apparatus is claimed, there must be a suggestion or motivation in the reference to do so." *In re Mills*, 916 F.2d at 682, 16 USPQ2d at 1432; *In re Fritch*, 972 F.2d 1260 (Fed. Cir. 1992), 23 USPQ2d 1780.

Moreover, the Examiner failed to establish the factual inquires in the three-pronged test as required by the *Graham* factual inquires. There are significant differences between the cited references and the claimed invention as discussed above. Furthermore, the Examiner has not made an explicit analysis on the apparent reason to combine the known elements in the fashion in the claimed invention. Accordingly, there is no apparent reason to combine the teachings of Vasisht, Krantz, and Feeney in any combination.

In the present invention, the cited references do not expressly or implicitly disclose any of the above elements. In addition, the Examiner failed to present a convincing line of reasoning as to why a combination of Vasisht, Krantz, and Feeney is an obvious application of "discovering nearby hosts and applications for impromptu interactions using well-known ad-hoc network configuration", or an explicit analysis on the apparent reason to combine Vasisht, Krantz, and Feeney in the manner as claimed.

Therefore, Applicant believes that independent claims 1, 14, and 27 and their respective dependent claims are distinguishable over the cited prior art references.

VIII. CONCLUSION

Appellants respectfully request that the Board enter a decision overturning the Examiner's rejection of all pending claims, and holding that the claims satisfy the requirements of 35 U.S.C. §101, §102 and §103.

Respectfully submitted,

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IX. CLAIM APPENDIX

The claims of the present application which are involved in this appeal are as follows:

1. (previously presented) A method comprising:

creating a session-based ad-hoc group (SBG) within a well-known ad-hoc group (WKG) for impromptu interactions among unrelated mobile users, the SBG being one of an open SBG and a restricted SBG, the WKG having a WKG network configuration and a set of WKG interaction protocols, the SBG having SBG network configuration and a set of SBG interaction protocols; and

advertising information pertaining to the SBG on the WKG, the information including an access method for joining the restricted SBG.

2. (original) The method of claim 1 wherein creating the SBG comprises

obtaining the WKG network configuration and the set of WKG interaction protocols.

3. (original) The method of claim 2 wherein obtaining the WKG network configuration and the set of WKG interaction protocols comprises obtaining one of a pre-configuration on a retail device, a downloadable client software, and a public advertisement.

4. (previously presented) The method of claim 1 wherein the WKG creates one of an open WKG and a restricted WKG, the open WKG having no access control, the restricted WKG having an access control to selected users.

5. (previously presented) The method of claim 1 wherein creating the SBG comprises:

creating one of the open SBG and the restricted SBG, the open SBG having no access control, the restricted SBG having an access control to selected users.

6. (previously presented) The method of claim 5 wherein creating one of the open SBG and the restricted SBG comprises:

selecting at least an administrator to manage access to the restricted SBG and control changes to the SBG network configuration.

7. (original) The method of claim 6 wherein advertising comprises:

selecting an advertising node according to a criteria within the SBG;

collecting information on the SBG;

periodically joining the WKG to broadcast the SBG information and to collect information on the WKG or a nearby SBG; and

returning to the SBG to advertise the information collected on the WKG to SBG members.

8. (original) The method of claim 1 further comprising:

joining the WKG according to user configuration.

9. (original) The method of claim 8 wherein joining the WKG comprises:

joining the SBG.

10. (original) The method of claim 1 further comprising:

partitioning one of the WKG and the SBG.

11. (original) The method of claim 1 further comprising:

merging the WKG to one other WKG; and

merging the SBG to one other SBG.

12. (original) The method of claim 1 further comprising:

enabling interaction among the unrelated mobile users within the WKG or the SBG using the WKG interaction protocols or the SBG interaction protocols.

13. (original) The method of claim 12 wherein enabling interaction comprises:

managing an application;

discovering at least one of a host, an application, and a user profile;

managing distributed resource; and

managing group information.

14. (previously presented) An article of manufacture comprising:

a machine-accessible storage medium having stored thereon data that, when accessed by a machine, causes the machine to perform operations comprising:

creating a session-based ad-hoc group (SBG) within a well-known ad-hoc group (WKG) for impromptu interactions among unrelated mobile users, the SBG being one of an open SBG and a restricted SBG, the WKG having a WKG network configuration and a set of WKG interaction protocols, the SBG having SBG network configuration and a set of SBG interaction protocols; and

advertising information pertaining to the SBG on the WKG, the information including an access method for joining the restricted SBG.

15. (original) The article of manufacture of claim 14 wherein the data causing the machine to perform creating the WKG comprises data that, when accessed by the machine, causes the machine to perform operations comprising:

obtaining the WKG network configuration and the set of WKG interaction protocols to a general public.

16. (original) The article of manufacture of claim 15 wherein the data causing the machine to perform obtaining the WKG network configuration and the set of WKG interaction protocols comprises obtaining one of a pre-configuration on a retail device, a downloadable client software, and a public advertisement.

17. (original) The article of manufacture of claim 14 wherein the WKG is one of an open WKG and a restricted WKG, the open WKG having no access control, the restricted WKG having an access control to selected users.

18. (previously presented) The article of manufacture of claim 14 wherein the data causing the machine to perform creating the SBG comprises data that, when accessed by the machine, causes the machine to perform operations comprising:

creating one of the open SBG and the restricted SBG, the open SBG having no access control, the restricted SBG having an access control to selected users.

19. (previously presented) The article of manufacture of claim 18 wherein the data causing the machine to perform creating one of the open SBG and the restricted SBG comprises data that, when accessed by the machine, causes the machine to perform operations comprising:

selecting at least an administrator to manage access to the restricted SBG and control changes to the SBG network configuration.

20. (original) The article of manufacture of claim 19 wherein the data causing the machine to perform advertising comprises data that, when accessed by the machine, causes the machine to perform operations comprising:

selecting an advertising node according to a criteria within the SBG;

collecting information on the SBG;

periodically joining the WKG to broadcast the SBG information and to collect information on the WKG or a nearby SBG; and

returning to the SBG to advertise the information collected on the WKG to SBG members.

21. (original) The article of manufacture of claim 14 wherein the data further comprises data that, when accessed by the machine, causes the machine to perform operations comprising:

joining the WKG according to user configuration.

22. (original) The article of manufacture of claim 21 wherein the data causing the machine to perform joining the WKG comprises data that, when accessed by the machine, causes the machine to perform operations comprising:

joining the SBG.

23. (original) The article of manufacture of claim 14 wherein the data further comprises data that, when accessed by the machine, causes the machine to perform operations comprising:

partitioning one of the WKG and the SBG.

24. (original) The article of manufacture of claim 14 wherein the data further comprises data that, when accessed by the machine, causes the machine to perform operations comprising:

merging the WKG to one other WKG; and

merging the SBG to one other SBG.

25. (original) The article of manufacture of claim 14 wherein the data further comprises data that, when accessed by the machine, causes the machine to perform operations comprising:

enabling interaction among the unrelated mobile users within the WKG or the SBG using the WKG interaction protocols or the SBG interaction protocols.

26. (previously presented) The article of manufacture of claim 25 wherein the data causing the machine to perform enabling interaction comprises data that, when accessed by the machine, causes the machine to perform operations comprising:

managing an application;

discovering at least one of a host, an application, and a user profile;

managing distributed resource; and

managing group information.

27. (previously presented) A system comprising:

a well-known ad-hoc group (WKG) creator to create a WKG for impromptu interactions among unrelated mobile users, the WKG having a WKG network configuration and a set of WKG interaction protocols; and

a session-based ad-hoc group (SBG) creator to create a SBG within the WKG to allow a user to interact with other mobile users, the SBG being one of an open SBG and a restricted SBG, the SBG having SBG network configuration and a set of SBG interaction protocols, the SBG advertising information pertaining to the SBG on the WKG, the information including an access method for joining the restricted SBG.

28. (original) The system of claim 27 wherein the WKG is an open or restricted WKG.

29. (previously presented) The system of claim 27 wherein the open SBG has no access control and the restricted SBG has an access control to selected users.

30. (original) The system of claim 29 wherein the SBG has at least an administrator to manage access to the restricted SBG and control changes to the SBG network configuration.

X. EVIDENCE APPENDIX

None

XI. RELATED PROCEEDINGS APPENDIX

None